

## **Translation of DE-A-3018691**

### Claims

1. A container which is closed all-around, comprises a cuttable and/or breakable thermoplastic material and accommodates a predetermined amount of a material which can be removed therefrom, in particular a medication, characterised in that the container is of an elongate configuration and is bendable transversely with respect to its longitudinal axis, wherein in the bent condition an intermediate space is maintained within the container at its bend location and that in that way it is possible to bridge over the distance between the mouth and the nose of a person as soon as and as long as a respective end is disposed in the mouth and in the nose respectively of said person.

2. A container according to claim 1 characterised in that it substantially comprises a tubular main body (1) with closed-off ends.

3. A container according to claim 1 or claim 2 characterised in that the main body (1) is bent in a U-shape.

4. A container according to one of the preceding claims characterised in that its ends are in the form of break-off closures (2, 2a).

5. A container according to one of the preceding claims characterised in that a constriction (3) is provided between the main body (1) and the break-off closure (2, 2a), the wall of the constriction (3) at least partially separating an end chamber (4) from the interior of the main body (1).

6. A container according to claim 5 characterised in that the wall which has remained on the part of the main body (1) after removal of the break-off closure (2, 2a) has an opening which is arranged coaxially with

respect to the axis of the main body and which is substantially smaller than the inside diameter of the main body.

### Description

The invention relates to a container as set forth in the classifying portion of claim 1.

A known container of the above-indicated kind has a broad, flat main body for accommodating a medication and a tube portion which is fitted thereto and at the end of which is disposed a break-off closure, the diameter of the tube portion being approximately equal to the thickness of the flat main body. The stiff tube portion when free from the break-off closure serves for being inserted into the nose so that, when a pressure is applied to the main body, the fluid medication can be sprayed into the nose (German patent specification No 21 55 993).

The operation of introducing a medication into the nose of a person is usually also effected by using a tube portion of which one end is closed by means of a plug and into the other end of which a medication is dripped into the tube from a dropping cannula. The partially filled tube portion is then bent in such a way that, when one end is introduced into the mouth of a person and the other end into the nose, a low point is formed, at which the medication collects, so that, when the plug is removed, the medication in the tube portion does not flow into the mouth. The medication is expelled into the nose by blowing into the tube portion. The use of an open tube portion which is possibly repeatedly used is not satisfactory from the hygiene point of view.

The object of the present invention is to provide a container which serves for one-off use and with which a medication can be introduced into the nose or into the pharyngeal cavity in the same manner as with the tube portion. In accordance with the invention that object is attained by the

features in the characterising portion of claim 1. The particular configuration of the container permits it to be used in the same manner as the open tube portion when the two ends of the closed container as manufactured are opened. The container can be easily manufactured on a blow moulding machine, in which respect one manufacturing mould can be designed for the manufacture of a respective plurality of containers.

The features of claim 3 permit simple handling of the container.

The container can be opened at its ends without a particular tool, when employing the features of claim 4.

Further advantages will be apparent from the other claims, the description and the drawing. The drawing diagrammatically shows a plan view on an enlarged scale of a container as an embodiment by way of example of the subject of the invention.

The container has a tubular main body 1 which is throughout of the same diameter and the same wall thickness and which is closed at each of its ends by a respective break-off closure 2 and 2a respectively. The break-off closure 2 is separated from the main body 1 by a constriction 3 whose wall however leaves a small opening free between the main body 1 and a hollow ball 4 of the break-off closure 2. The diameter of the opening is substantially smaller than the inside diameter of the main body 1. At the side remote from the main body 1 the hollow ball 4 is adjoined by a flat gripping portion which is enlarged at its end to form a rectangle and which has a rectangular projecting portion 6 which is hollow. The break-off closure 2a at the other end of the main body 1 is designed in the same fashion.

The container comprises a thermoplastic material which can be worked on a blow moulding machine, in particular synthetic resin, for example polyethylene. The U-shaped main body, as measured from the

constriction 3 to the constriction 3a upstream of the hollow ball 4a, is about 110 mm long and is of an outside diameter of about 4 mm and a wall thickness of about 0.5 mm. The hollow balls 4 and 4a are of the same outside diameter. The main body 1 is at least partially filled with a liquid or a powder substance, in particular a medication, which is introduced into the container during the container manufacturing process, before it is closed.

In use of the container the two break-off closures 2 and 2a are twisted off the main body 1, in which case the hollow balls 4, 4a break off at the respective constrictions 3 and 3a and each clear the respective small opening. The wall of the constriction is of an approximately hemispherical external configuration at the main body 1 and, when the break-off closure is removed, is pierced by the opening which then leads outwardly and the diameter of which is about 1 mm. The opening is selected to be of such a size that the material in the main body 1 cannot readily pass outwardly therethrough.

To introduce the content of the container into the nose or into the pharyngeal cavity the main body 1 is held in such a way that its bent central portion is disposed downwardly and accommodates the material in the container. One end of the main body 1 is placed in the mouth and the other end is introduced into the nose to a greater or lesser distance. The content of the tubular main body 1 is conveyed into the nose and possibly into the pharyngeal cavity by blowing into the main body 1. After the main body 1 is emptied the main body and the two break-off closures 2, 2a are thrown away.

The main body 1 can also be designed without a break-off closure if its ends are closed in the region of the constrictions 3, 3a. Prior to use of such a container the ends thereof have to be opened by means of a tool.

As the main body 1 is elastic it can also be straight and then has to be suitably bent for it to be used.